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ABSTRACT

In this guide for teaching science in the Duval County Public Schools, Jacksonville, Florida, the following items are included for each grade level from one to six: (1) county-adopted resources; (2) supplementary resources; (3) scope and sequence; (4) primary ideas, secondary ideas, and performance objectives; and (5) correlation with Instructional Management System skills. First grade themes are science and the senses, observing and classifying, air and water, and plants and rocks. Second grade themes are seasons, sound and nutrition, light and motion, heat energy and magnets, and plants and animals. Third grade themes are living things, earth and the universe, machines and electricity, and nutrition and the human body. Insects, working structures, matter, the solar system, earth, and habitat/adaptation are fourth grade themes. In the fifth grade curriculum, cells and the environment, matter and energy, earth and weather, space exploration, and the human body are the topics covered. Living things, matter and energy, communication, interdependence, and computers are the topics given for the sixth grade science curriculum. (CMG)

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ED235275

ELEMENTARY SCIENCE

1 - 6

Duval County Public Schools
Herb A. Sang, Superintendent

UD 023 125

1
ELEMENTARY SCIENCE

1-6

DUVAL COUNTY PUBLIC SCHOOLS
HERB A. SANG, SUPERINTENDENT

1982

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DUVAL COUNTY PUBLIC SCHOOLS
JACKSONVILLE, FLORIDA

HERB A. SANG, SUPERINTENDENT

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INTRODUCTION

This science guide covers grades 1-6 and includes, for each grade level, the following:

County-Adopted Resources

Supplementary Resources

Scope and Sequence

Primary Ideas, Secondary Ideas, and
Performance Objectives

Correlation with IMS Skills

Grade level sections are as follows:

Grade One - pp. 1-15

Grade Two - pp. 16-35

Grade Three - pp. 36-54

Grade Four - pp. 55-76

Grade Five - pp. 77-98

Grade Six - pp. 99-125

Questions regarding the guide should be directed to the science office, 390-2129.

GRADE ONE

COUNTY ADOPTED RESOURCES

- J. P. Barufaldi, et al., HEATH SCIENCE (Lexington Massachusetts, D. C. Heath and Company, 1981)
- J. P. Barufaldi, et al., HEATH SCIENCE, Duplicating Masters, (Lexington, Massachusetts, D. C. Heath and Company, 1981)
- J. P. Barufaldi, et al., HEATH SCIENCE, TEACHER'S RESOURCE BOOK, (Lexington, Massachusetts, D. C. Heath and Company, 1981)

HEATH SCIENCE KIT-Level One

SUPPLEMENTARY RESOURCES

Dairy and Food Nutrition Council Kit, Level One

Elementary Health Curriculum Guide, Duval County Public Schools, 1982

Elementary Social Studies, Duval County Public Schools, 1981

Humane Education, A Science Supplement K-3, Duval County Public Schools, 1981, Grade One

82-83 Films, The Duval County School Board Educational Media Center

ELEMENTARY SCIENCE SCOPE AND SEQUENCE
GRADE LEVEL: ONE

PRIMARY IDEA:	1.0	Through the senses, properties of objects are observed and investigated.
	SECONDARY IDEAS:	1.1 Objects have properties that can be identified through the use of the senses.
PRIMARY IDEA:	2.0	Discrimination of living and nonliving things are explored by the use of observation and classification.
	SECONDARY IDEAS:	2.1 There is a difference between living and nonliving things. 2.2 Animals have the same needs which are met in different ways. 2.3 There are many different types of weather.
PRIMARY IDEA:	3.0	Air and water in the environment are important to most living things.
	SECONDARY IDEAS:	3.1 Air exists, has properties, and has an observable effect on all things. 3.2 Water is found in different forms and in many places.
PRIMARY IDEA:	4.0	Materials in the immediate environment are classified through observing and identifying forms of plants, rocks and soil.
	SECONDARY IDEAS:	4.1 The growth and use of plants is important to living things in the environment. 4.2 Rocks, which make up soil, are used in numerous ways and are found throughout the earth's crust.

GRADE LEVEL: One

THEME: Science and the Senses

PRIMARY IDEA: 1.0 Through the senses, properties of objects are observed and investigated.	
SECONDARY IDEA	OBJECTIVES
1.1 Objects have properties that can be identified through the use of the senses.	Given the proper materials and directions, the student will: 1.1.1 identify size, shape, and color as properties of objects. 1.1.2 classify objects by size, shape, and color. 1.1.3 state that people need light to see. 1.1.4 identify the sources of different kinds of textures. 1.1.5 identify the eyes, ears, nose, tongue, and skin as parts of the body that are able to detect particular sensations.

GRADE LEVEL: One

THEME: Observing and Classifying

PRIMARY IDEA: 2.0 Discrimination of living and nonliving things are explored by the use of observation and classification.	
SECONDARY IDEA	OBJECTIVES
2.1 There is a difference between living and nonliving things.	Given the proper materials and directions, the student will: 2.1.1 observe and describe properties of living things. 2.1.2 classify objects as either living or nonliving. 2.1.3 state that living things eat, move, grow, and change. 2.1.4 state that children are living.

GRADE LEVEL: One

THEME: Observing and Classifying

PRIMARY IDEA: 2.0 Discrimination of living and nonliving things are explored by the use of observation and classification.

SECONDARY IDEA

OBJECTIVES

2.2 Animals have the same needs which are met in different ways.

Given the proper materials and directions, the student will:

- 2.2.1 compare animals and identify their similarities and differences.
- 2.2.2 describe ways animals move and obtain food.
- 2.2.3 describe different body coverings and their functions.
- 2.2.4 identify needs common to all animals, such as food protection, and a place to live.
- 2.2.5 describe different places where animals live.

GRADE LEVEL: One

THEME: Observing and Classifying

PRIMARY IDEA: 2.0 Discrimination of living and nonliving things are explored by the use of observation and classification.	
SECONDARY IDEA	OBJECTIVES
2.3 There are many different types of weather.	Given the proper materials and directions, the student will: 2.3.1 observe and describe the weather on a given day. 2.3.2 describe appropriate activities and clothing for different kinds of weather conditions. 2.3.3 observe and record changes in the weather.

GRADE LEVEL: One

THEME: Air and Water

PRIMARY IDEA: 3.0 Air and water in the environment are important to most living things.	
SECONDARY IDEA	OBJECTIVES
3.1 Air exists, has properties, and has an observable effect on all things.	Given the proper materials and directions, the student will: 3.1.1 observe air directly with the sense of touch and indirectly with the senses of sight, hearing, and smell. 3.1.2 demonstrate that air can make objects move. 3.1.3 demonstrate that air takes up space. 3.1.4 state that air can support heavy objects. 3.1.5 state that most living things need air. 3.1.6 identify different ways that people use air. 3.1.7 identify human activities that cause air pollution.

GRADE LEVEL: One

THEME: Air and Water

PRIMARY IDEA: 3.0 Air and water in the environment are important to most living things.	
SECONDARY IDEA	OBJECTIVES
3.2 Water is found in different forms and in many places.	Given the proper materials and directions, the student will: 3.2.1 identify and describe ways people use water. 3.2.2 name places where water can be found. 3.2.3 observe and describe liquid water. 3.2.4 identify ice as a form of water. 3.2.5 generalize and state that water is in the air even though it cannot be seen. 3.2.6 state several ways in which water is important for living things. 3.2.7 identify and describe ways that water can be wasted and conserved.

GRADE LEVEL: One

THEME: Plants and Rocks

PRIMARY IDEA: 4.0 Materials in the immediate environment are classified through observing and identifying forms of plants, rocks, and soil.	
SECONDARY IDEA	OBJECTIVES
4.1 The growth and use of plants is important to living things in the environment.	Given the proper materials and directions, the student will: 4.1.1 observe and describe the roots, stems, and leaves of plants. 4.1.2 identify similarities and differences among plants. 4.1.3 state that light and water are necessary for normal plant growth. 4.1.4 state that plants may grow from parts of plants other than seed. 4.1.5 identify foods obtained from plants.

GRADE LEVEL: One

THEME: Plants and Rocks

PRIMARY IDEA: 4.0 Materials in the immediate environment are classified through observing and identifying forms of plants, rocks, and soil.	
SECONDARY IDEA	OBJECTIVES
4.2 Rocks, which make up soil, are used in numerous ways and are found throughout the earth's crust.	Given the proper materials and directions, the student will: 4.2.1 describe places where rocks and soil can be found. 4.2.2 observe and describe physical properties of rocks and soil. 4.2.3 list some ways people use rocks. 4.2.4 generalize and state ways that plants and animals use soil.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE - GRADE ONE

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
1.1	Science and the Senses	20 days	J. P. Barufaldi, et al., <u>HEATH SCIENCE</u> , (Lexington, Massachusetts, D. C. Heath and Co., 1981) pp 1-39	<u>Elementary Health Curriculum Guide</u>, Duval County Public School, 1982, Grade One <u>Elementary Social Studies</u>, Duval County Public Schools, 1981, Grade One - 2.2.2 <u>The Dairy Council-Nutrition Kit-Level One</u> <u>Films</u> Learning to Use your Senses- 11 min. C. Senses - 6 films C.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE - GRADE ONE

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
2.1	Observing and Classifying	7 days	J. P. Barufaldi, et al., <u>HEATH SCIENCE</u> , (Lexington, Massachusetts, D. C. Heath and Co., 1981) pp 41-53	<u>The Dairy Council</u> , Nutrition Kit. Level One <u>Film</u> Living and Nonliving Things- 11 min. C.
2.2	Animals	12 days	55-77	<u>Humane Education</u> , A Science Supplement K-3, Duval County Public Schools, 1981, pp. 5-6 <u>Films</u> Animals and their Food- 10 min. C. Animals are Different and Alike- 11 min. C. Animals and their Homes- 9 min. C. Animals Eat in Many Ways- 10 min. C. Animals Growing Up- 11 min. C.
2.3	Weather	7 days	79-91	<u>Films</u> The Weather Watchers- 30 min. C. Weather Forecasting- 22 min. C. What Makes Weather- 14 min. C. <u>Elementary Social Studies</u> , Duval County Public Schools, 1981, Grade One 4.3.1

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE - GRADE ONE

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
3.1	Air	8 days	93-111	<u>Films</u> Air (Series, A First Film)- 10 min C. Air All Around- 8 min. C. Air and What It Does- 11 min C. Learning About Air- 11 min. C.
3.2	Water	7 days	113-131	<u>Films</u> Learning About Water- 8 min. Water for the City- 11 min. C. Water-Friend or Enemy- 16 min. C. Water Runs Downhill- 12 min. C. <u>Elementary Social Studies, Duval County Public Schools, 1981, Grade One 4.1.1</u>

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS
SCIENCE - GRADE ONE

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
4.1	Plants	12 days	133-157	<u>Films</u> Learning About Seeds- 11 min. C. Plant and Animals Depend on Each Other- 11 min C. The Tree- 11 min. C. Trees-Our Plant Giants- 14 min. C. What Do Seeds Do? A First Film- 11 min. C.
4.2	Rocks and Soil	7 days	159-175	<u>Films</u> Rocks for Beginners- 16 min. B&W Soil: An Introduction- 9 min. C.

CORRELATION BETWEEN INSTRUCTIONAL MANAGEMENT SYSTEM (IMS) SKILLS

AND HEATH SCIENCE ACTIVITY SHEETS

SCIENCE - GRADE ONE

IMS NO.	HEATH ACTIVITY SHEET/DUPLICATING MASTER PAGE NUMBER
	<u>COMMUNICATIONS</u>
1.C.1	6, 7, 8, 9, 14, 17, 19, 20, 26, 28, 32, 33, 35, 44, 47, 51
1.C.2	32, 37, 43, 48, 50, 52, 54
1.C.3	13, 29, 30, 31, 40
1.C.4	37, 53, 54
1.C.5	21, 25, 46
1.C.6	5, 16, 18, 21, 27, 30, 31, 38, 42, 45, 46
1.C.7	22, 36, 41
1.C.8	12
1.C.9	10, 15, 21, 23, 24
1.C.12	11, 34, 39
	<u>MATHEMATICS</u>
1.N.8	49
1.G.1	1, 2, 3, 4, 9

GRADE TWO

COUNTY ADOPTED RESOURCES

- J. P. Barufaldi, et al., HEATH SCIENCE, (Lexington, Massachusetts, D. C. Heath and Company, 1981).
- J. P. Barufaldi, et al., HEATH SCIENCE, Duplicating Masters, (Lexington, Massachusetts, D. C. Heath and Company, 1981).
- J. P. Barufaldi, et al., HEATH SCIENCE, TEACHER'S RESOURCE BOOK, (Lexington, Massachusetts, D.C. Heath and Company, 1981).

HEATH SCIENCE KIT, Level Two

SUPPLEMENTARY RESOURCES

Duval County Comprehensive Health Education Program (Grade 3)

Elementary Social Studies, Duval County Public Schools, 1981 (Grade 2)

Humane Education, A Science Supplement K-3, Duval County Public Schools, 1981, (Grade 2), (Grade 3)

The Dairy Council, Nutrition Kit, Level 2

82-83 Films, The Duval County School Board Educational Media Center

ELEMENTARY SCIENCE SCOPE AND SEQUENCE
GRADE LEVEL: TWO

PRIMARY IDEA:	1.0	Seasons of the year have a direct relationship in the world of plants and animals and the activities of people.
	SECONDARY IDEAS:	1.1 Each season is associated with certain predictable events.
PRIMARY IDEA:	2.0	Properties of sound and good nutrition are important to the human body.
	SECONDARY IDEAS:	2.1 Much information is observed and communicated through the sense of hearing.
		2.2 The human body undergoes various changes which are dependent upon proper food and good hygiene.
PRIMARY IDEA:	3.0	The properties of light and motion are related.
	SECONDARY IDEAS:	3.1 A shadow is produced when an object is positioned between a light source and a surface.
		3.2 The motion of an object is determined by its position in relation to other objects.
		3.3 Day and night are caused by the rotation of the earth.
PRIMARY IDEA:	4.0	Patterns in the physical world are observed through heat energy and magnets.
	SECONDARY IDEAS:	4.1 Heat is a form of energy that can be transferred from one object to another.
		4.2 Magnets are objects which attract certain kinds of metal.
PRIMARY IDEA:	5.0	Plants and animals in different environments undergo changes.
	SECONDARY IDEAS:	5.1 Plants and animals live in many places on land.
		5.2 Plants and animals have specific adaptations which enable them to live in water.
		5.3 Fossils and other remains of distinct plants and animals, provide data for the preservation of various life forms.

GRADE LEVEL: Two

THEME: Seasons

PRIMARY IDEA: 1.0 Seasons of the year have a direct relationship in the world of plants and animals and the activities of people.	
SECONDARY IDEA	OBJECTIVES
1.1 Each season is associated with certain predictable events.	Given the proper materials and directions, the student will: 1.1.1 name the four seasons in order. 1.1.2 identify the weather characteristics of each season. 1.1.3 describe the effects of each season's weather on living things.

GRADE LEVEL: Two

THEME: Sound and Nutrition

PRIMARY IDEA: 2.0 Properties of sound and good nutrition are important to the human body.	
SECONDARY IDEA	OBJECTIVES
2.1 Much information is observed and communicated through the sense of hearing.	Given the proper materials and directions, the student will: 2.1.1 discriminate between high- and low-pitched sounds and between loud and soft ones. 2.1.2 state that something must move back and forth very quickly (vibrate) if there is to be a sound. 2.1.3 state that the sounds we hear normally travel through the air. 2.1.4 identify the ear as the part of the body that senses sound. 2.1.5 describe proper care and protection of the ears.

GRADE LEVEL: Two

THEME: Sound and Nutrition

PRIMARY IDEA: 2.0 Properties of sound and good nutrition are important to the human body.	
SECONDARY IDEA	OBJECTIVES
2.2 The human body undergoes various changes which are dependent upon proper food and good hygiene.	Given the proper materials and directions, the student will: 2.2.1 observe and identify different kinds of food. 2.2.2 explain why people need many different kinds of food. 2.2.3 discuss good hygiene habits for handling food. 2.2.4 discuss the importance of teeth. 2.2.5 describe the changes that occur in people as they grow.

GRADE LEVEL: Two

THEME: Light and Motion

PRIMARY IDEA: 3.0 The properties of light and motion are related.	
SECONDARY IDEA	OBJECTIVES
3.1 A shadow is produced when an object is positioned between a light source and a surface.	Given the proper materials and directions, the student will: 3.1.1 make shadows by placing an object between a light source and a receiving surface. 3.1.2 identify artificial and natural sources of light. 3.1.3 identify objects that allow light to pass through and objects that stop light. 3.1.4 identify objects by their shadows. 3.1.5 change the size and shape of a shadow by moving the object that cast it. 3.1.6 infer the sun's position from an object and its shadow.

GRADE LEVEL: Two

THEME: Light and Motion

PRIMARY IDEA: 3.0 The properties of light and motion are related.	
SECONDARY IDEA	OBJECTIVES
3.2 The motion of an object is determined by its position in relation to other objects.	Given the proper materials and directions, the student will: 3.2.1 identify and describe different kinds of motion. 3.2.2 use reference objects to describe relative position. 3.2.3 describe different paths in which objects move. 3.2.4 identify the speed of objects as fast or slow. 3.2.5 use reference objects to describe relative motion of objects.

GRADE LEVEL: Two

THEME: Light and Motion

PRIMARY IDEA: 3.0 The properties of light and motion are related.

SECONDARY IDEA

OBJECTIVES

3.3 Day and night are caused by the rotation of the earth.

Given the proper materials and directions, the student will:

- 3.3.1 describe the differences between day and night.
- 3.3.2 state that the sun is always shining.
- 3.3.3 demonstrate that the rotation of the earth causes day and night.
- 3.3.4 state why it is impossible to feel the earth turn.
- 3.3.5 state reasons for the apparent motion of the moon across the sky and its apparent change in shape.

GRADE LEVEL: Two

THEME: Heat Energy and Magnets

PRIMARY IDEA: 4.0 Patterns in the physical world are observed through heat energy and magnets.	
SECONDARY IDEA	OBJECTIVES
4.1 Heat is a form of energy that can be transferred from one object to another.	Given the proper materials and directions, the student will: 4.1.1 identify and describe sources of heat. 4.1.2 state that heat is a form of energy. 4.1.3 state that heat energy may move from one place to another. 4.1.4 demonstrate the use of a simple thermometer. 4.1.5 identify desired and undesired changes brought about in a substance by adding or removing heat energy.

GRADE LEVEL: Two

THEME: Heat Energy and Magnets

PRIMARY IDEA: 4.0 Patterns in the physical world are observed through heat energy and magnets.

SECONDARY IDEA

OBJECTIVES

4.2 Magnets are objects which attract certain kinds of metal.

Given the proper materials and directions, the student will:

- 4.2.1 identify objects attracted to a magnet.
- 4.2.2 identify the poles as the places where the pull of a magnet is the strongest.
- 4.2.3 demonstrate that poles of two magnets either attract or repel each other.
- 4.2.4 use a strong magnet to make a permanent magnet from a steel needle.
- 4.2.5 state the uses of magnets.

GRADE LEVEL: Two

THEME: Plants and Animals

PRIMARY IDEA: 5.0 Plants and animals in different environments undergo changes.

SECONDARY IDEA

5.1 Plants and animals live in many places on land.

OBJECTIVES

Given the proper materials and directions, the student will:

- 5.1.1 identify and describe various plants and animals that live on land.
- 5.1.2 compare and contrast the physical characteristics of several different land environments.
- 5.1.3 describe the physical characteristics of a desert and identify ways in which some plants and animals have adapted to it.
- 5.1.4 describe the physical characteristics of a forest and name some plants and animals of the forest.

GRADE LEVEL: Two

THEME: Plants and Animals

PRIMARY IDEA: 5.0 Plants and animals in different environments undergo changes.

SECONDARY IDEA

OBJECTIVES

5.2 Plants and animals have specific adaptations which enable them to live in water.

Given the proper materials and directions, the student will:

- 5.2.1 describe animals that live in or near a pond.
- 5.2.2 describe ways in which protective coloration helps an animal to live in its environment.
- 5.2.3 list several reasons why so many insects are able to live in a pond environment.
- 5.2.4 observe and describe characteristics of plants and animals that live in the ocean.

GRADE LEVEL: Two

THEME: Plants and Animals

PRIMARY IDEA: 5.0 Plants and animals in different environments undergo change.

SECONDARY IDEA

OBJECTIVES

5.3 Fossils and other remains of distinct plants and animals, provide data for the preservation of various life forms.

Given the proper materials and directions, the student will:

- 5.3.1 compare and contrast physical characteristics of dinosaurs.
- 5.3.2 discuss how fossils help people learn about plants and animals that lived long ago.
- 5.3.3 describe various animals that are now extinct.
- 5.3.4 describe plants and animals that are endangered.
- 5.3.5 discuss ways to prevent extinction of additional kinds of plants and animals.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE - GRADE TWO

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
1.1	Seasons	8 days	J. P. Barufaldi, et al., <u>HEATH SCIENCE</u> , (Lexington, Massachusetts, D. C. Heath and Company, 1981) pp 1-21	Duval County Public Schools, <u>Social Studies Guide</u> - Grade One, 1981, 4.3.1 <u>Films</u> Spring- 11 min. C. Spring Comes to the City- 11 min. C. Spring Is a Season- 11 min. C. Summer- 11 min. C. Summer is for Growing- 15 min. C. Winter Comes to the City- 11 min. C. Winter Comes to the Forest- 11 min. C.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS
SCIENCE - GRADE TWO

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
2.1	Sound	7 days	22-39	<u>Films</u> Learning About Sound- 17 min. C. Sound and How It Travels- 11 min. C.
2.2	Eating and Growing	7 days	40-63	<u>The Dairy Council, Nutrition Kit, Level 2</u> <u>Films</u> Eat for Health- 8 min. C. Eat Well, Grow Well- 11 min. C. Health: Exercise, Rest, and Sleep- 11 min. C. Health-Food and Nutrition- 11 min. C.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE - GRADE TWO

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
3.1	Light and Shadow	8 days	64-85	<u>Films</u> Learning About Light- 15 min. C. Light, Let's Talk About It- 16 min. C. Light and What it Does- 11 min. C. Shadows on our Turning Earth- 10 min. C.
3.2	Motion	6 days	86-103	<u>Films</u> Movement Exploration, What Am I?- 11 min. C. Movement Exploration- 22 min. C.
3.3	Night and Day	7 days	104-125	<u>Films</u> The Earth in Motion- 12 min. B&W The Globe and Our Round Earth- 11 min. C.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE - GRADE TWO

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
4.1	Heat Energy	6 days	126-145	<u>Films</u> Heat and How We Use It- 11 min. C.
4.2	Magnets	7 days	146-163	<u>Films</u> Magnets and their Uses- 9 min. C. Michael Discovers the Magnet- 11 min. B&W

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE - GRADE TWO

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
5.1	Plants and Animals on Land	8 days	164-191	Humane Education, A Science Supplement K-3, Duval County Public Schools, 1981, p 9 <u>Films</u> Animals and Their Homes- 9 min. C. Animals of the Indian Jungle- 11 min. C. Animal Town of the Prairie- 10 min. C.
5.2	Plants and Animals in Water	10 days	192-223	<u>Films</u> A Pond- 6 min. C. Petey the Pelican- 9 min. C. The Ocean- 11 min. C. The Pond- 10 min. C.
5.3	Plants and Animals of Long Ago	7 days	224-247	Humane Education, A Science Supplement K-3, Duval County Public Schools, 1981, p. 12 <u>Film</u> Fossils are Interesting- 10 min. C.

CORRELATION BETWEEN INSTRUCTIONAL MANAGEMENT SYSTEM (IMS) SKILLS

AND HEATH SCIENCE ACTIVITY SHEETS

SCIENCE - GRADE TWO

IMS NO.	HEATH ACTIVITY SHEET/DUPLICATING MASTER PAGE NUMBER
	<u>COMMUNICATIONS</u>
2.V.1	5, 14, 15, 44, 50, 56, 57, 61
2.V.5	44, 61, 63
2.WA.1	63
2.C.1	2, 8, 13, 14, 16, 25, 32, 40, 41, 53, 54, 59
2.C.2	6, 7, 13, 19, 20, 26, 32, 38, 39, 45, 51, 52, 58, 63, 64, 70
2.C.3	11, 12, 28, 31, 43, 52
2.C.4	20, 58, 64, 71
2.C.6	4, 6, 8, 9, 10, 11, 14, 16, 17, 19, 22, 29, 30, 31, 33, 34, 36, 37, 38, 42, 43, 47, 48, 55, 56, 60, 62, 65, 67, 68
2.C.7	21, 23, 24, 33, 42, 45, 46
2.C.8	49
2.C.9	2, 3, 21, 27, 46
2.C.13	1, 6, 15
2.W.1	28, 31, 47, 49, 69

CORRELATION BETWEEN INSTRUCTIONAL MANAGEMENT SYSTEM (IMS) SKILLS
AND HEATH SCIENCE ACTIVITY SHEETS

SCIENCE - GRADE TWO

IMS NO.	HEATH ACTIVITY SHEET/DUPLICATING MASTER PAGE NUMBER								
	<u>MATHEMATICS</u> <table><tr><td data-bbox="234 548 306 581">2.N.8</td><td data-bbox="439 548 572 581">35, 66, 69</td></tr><tr><td data-bbox="234 602 306 634">2.N.9</td><td data-bbox="439 602 453 634">9</td></tr><tr><td data-bbox="234 656 306 688">2.M.5</td><td data-bbox="439 656 465 688">18</td></tr><tr><td data-bbox="234 709 306 742">2.P.3</td><td data-bbox="439 709 465 742">18</td></tr></table>	2.N.8	35, 66, 69	2.N.9	9	2.M.5	18	2.P.3	18
2.N.8	35, 66, 69								
2.N.9	9								
2.M.5	18								
2.P.3	18								

GRADE THREE

COUNTY ADOPTED RESOURCES

- J. P. Barufaldi, et al., HEATH SCIENCE, (Lexington, Massachuetts, D. C. Heath and Company, 1981)
- J. P. Barufaldi, et al., HEATH SCIENCE, Duplicating Masters, (Lexington, Massachusetts, D.C. Heath and Company, 1981)
- J. P. Barufaldi, et al., HEATH SCIENCE, TEACHER'S RESOURCE BOOK, (Lexington, Massachusetts, D.C. Heath and Company, 1981)

HEATH SCIENCE KIT - Level Three

SUPPLEMENTARY RESOURCES

- Duval County Comprehensive Health Education Program (Grade Three) (Grade Four)
- Elementary Social Studies, Duval County Public Schools, 1981 (Grade Three)
- Energy Conservation and Education In the Duval County School System, Duval County Public Schools, 1980
- Humane Education, A Science Supplement K-3, Duval County Schools, 1981, Grade Three
- The Dairy Council, Nutrition Kit, Level Three
- 82-83 Films, The Duval County School Board Educational Media Center.

ELEMENTARY SCIENCE SCOPE AND SEQUENCE
GRADE LEVEL: THREE

- | | | |
|------------------|-----|--|
| PRIMARY IDEA: | 1.0 | All organisms interact with their environment and with other organisms. |
| SECONDARY IDEAS: | 1.1 | Plants and animals are specially equipped for adapting to their habitats. |
| | 1.2 | Interaction and changes occur within a population. |
| | 1.3 | Communities consist of many populations, each depending on the other. |
| PRIMARY IDEA: | 2.0 | The physical environment undergoes many changes. |
| SECONDARY IDEAS: | 2.1 | The water cycle demonstrates a relationship between water, earth, and living organisms. |
| | 2.2 | The earth's surface is constantly being changed by environmental forces. |
| | 2.3 | Through observation and classification, identification of the sun and stars are made. |
| PRIMARY IDEA: | 3.0 | There is a great dependency on machines and electricity. |
| SECONDARY IDEAS: | 3.1 | The utilization of machines makes work easier. |
| | 3.2 | Electricity is a form of energy used to produce heat and light. |
| PRIMARY IDEA: | 4.0 | Good nutrition is important to the human body. |
| SECONDARY IDEAS: | 4.1 | A proper diet provides energy and materials necessary for the body to grow. |
| | 4.2 | The digestive system provides the channel by which the body receives nutrients needed for energy, growth and repair. |

GRADE LEVEL: Three

THEME: Living Things

PRIMARY IDEA: 1.0 All organisms interact with their environment and with other organisms.	
SECONDARY IDEA	OBJECTIVES
1.1 Plants and animals are specially equipped for adapting to their habitats.	Given the proper materials and directions, the student will: 1.1.1 describe a variety of plants and animals and state where they live. 1.1.2 describe body parts and explain how they enable plants and animals to live in their habitats. 1.1.3 identify and describe a variety of habitats. 1.1.4 explain why animals migrate. 1.1.5 identify things that animals need to live and stay alive in their habitats.

GRADE LEVEL: Three

THEME: Living Things

PRIMARY IDEA: 1.0 All organisms interact with their environment and with other organisms.	
SECONDARY IDEA	OBJECTIVES
1.2 Interaction and changes occur within a population.	Given the proper materials and directions, the student will: 1.2.1 identify a variety of populations. 1.2.2 use seeds as an example to explain how new populations can be formed. 1.2.3 explain ways that populations increase in size. 1.2.4 describe populations that live and work together in groups. 1.2.5 describe what happens to a population when food is limited.

GRADE LEVEL: Three

THEME: Living Things

PRIMARY IDEA: 1.0 All organisms interact with their environment and with other organisms.	
SECONDARY IDEA	OBJECTIVES
1.3 Communities consist of many populations, each depending on the other.	Given the proper materials and directions, the student will: 1.3.1 identify activities of organisms in a community. 1.3.2 explain the need for food and how organisms obtain or make food. 1.3.3 explain how a green plant obtains the materials to make food. 1.3.4 describe the importance of soil-makers to a community. 1.3.5 describe populations in a community and identify the plant-eaters and animal-eaters. 1.3.6 explain what a food chain shows. 1.3.7 identify and describe body parts and behaviors of animals that enable them to protect themselves. 1.3.8 identify, describe, and classify changes in a community.

GRADE LEVEL: Three

THEME: Earth and The Universe

PRIMARY IDEA: 2.0 The physical environment undergoes many changes.

SECONDARY IDEA	OBJECTIVES
2.1 The water cycle demonstrates a relationship between water, earth, and living organisms.	Given the proper materials and directions, the student will: 2.1.1 describe the relationship between water vapor and liquid water. 2.1.2 compare dew and frost. 2.1.3 compare snow, sleet, and rain. 2.1.4 compare clouds and fog. 2.1.5 explain how ground water is formed and what happens to it. 2.1.6 trace the different paths which water may take during the water cycle. 2.1.7 identify some uses of water stored behind a dam. 2.1.8 identify ways that people waste or pollute water.

GRADE LEVEL: Three

THEME: Earth and the Universe

PRIMARY IDEA: 2.0 The physical environment undergoes many changes.	
SECONDARY IDEA	OBJECTIVES
2.2 The earth's surface is constantly being changed by environmental forces.	Given the proper materials and directions, the student will: 2.2.1 describe different kinds of land forms. 2.2.2 identify four ways in which rocks can be weathered. 2.2.3 describe how each cause of erosion acts on weathered materials. 2.2.4 observe and describe what happens when sediment is deposited by moving water. 2.2.5 identify and explain different ways in which the earth's surface can be formed into mountains. 2.2.6 explain why the earth's surface has not been leveled.

GRADE LEVEL: Three

THEME: Earth and the Universe

PRIMARY IDEA: 2.0 The physical environment undergoes many changes.

SECONDARY IDEA

OBJECTIVES

2.3 Through observation and classification, identification of the sun and stars are made.

Given the proper materials and directions, the student will:

- 2.3.1 identify the source of a star's light.
- 2.3.2 describe the effect of sunlight on the visibility of other stars.
- 2.3.3 classify stars on the basis of their relative color and temperature.
- 2.3.4 define the sun as a fairly average-size yellow star, many times larger than Earth.
- 2.3.5 explain why the sun appears brighter and larger than any other star.
- 2.3.6 describe the importance of the sun to life on Earth.
- 2.3.7 explain how the sun is used to tell time and produce energy on Earth.
- 2.3.8 define the term constellation and give some examples.
- 2.3.9 describe and explain the apparent motion of stars and constellations.
- 2.3.10 explain how a telescope is important in the study of stars.

GRADE LEVEL: Three

THEME: Machines and Electricity

PRIMARY IDEA: 3.0 There is a great dependency on machines and electricity.	
SECONDARY IDEA	OBJECTIVES
3.1 The utilization of machines makes work easier.	Given the proper materials and directions, the student will: 3.1.1 define the term machine. 3.1.2 identify and describe the functions of a gear, a ramp, and a wedge. 3.1.3 name and describe a variety of machines and their functions.

GRADE LEVEL: Three

THEME: Machines and Electricity

PRIMARY IDEA: 3.0 There is a great dependency on machines and electricity.

SECONDARY IDEA

OBJECTIVES

3.2 Electricity is a form of energy used to produce heat and light.

Given the proper materials and directions, the student will:

- 3.2.1 trace the movement of an electric current along a complete circuit and describe what happens as it passes through a light bulb.
- 3.2.2 compare the thickness of a wire to the amount of heat energy and light energy produced as an electric current passes through it.
- 3.2.3 describe the relationship between electricity and magnetism in an electromagnet.
- 3.2.4 list ways people can conserve electrical energy to prolong the availability of certain natural resources.
- 3.2.5 describe safety precautions one should follow while using electricity.

GRADE LEVEL: Three

THEME: Nutrition and the Human Body

PRIMARY IDEA: 4.0 Good nutrition is important to the human body.	
SECONDARY IDEA	OBJECTIVES
4.1 A proper diet provides energy and materials necessary for the body to grow.	Given the proper materials and directions, the student will: 4.1.1 identify foods that are rich in starches, sugars, fats, and proteins. 4.1.2 explain some functions of starches, sugars, fats, and proteins in the body. 4.1.3 list some foods that are major sources of minerals and vitamins. 4.1.4 identify foods from the four basic food groups. 4.1.5 identify an unbalanced diet and make adjustments required to balance it. 4.1.6 plan menus for breakfast, lunch, and dinner.

GRADE LEVEL: Three

THEME: Nutrition and the Human Body

PRIMARY IDEA: 4.0 Good Nutrition is important to the human body.	
SECONDARY IDEA	OBJECTIVES
4.2 The digestive system provides the channel by which the body receives nutrients needed for energy, growth, and repair.	Given the proper materials and directions, the student will: 4.2.1 describe what must happen to food before it can provide energy for the body. 4.2.2 trace the pathway of food through the digestive system. 4.2.3 name and describe various parts of the digestive system and their associated functions.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE - GRADE THREE

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
1.1	Plant and Animal	7 days	J. P. Barufaldi, et al, <u>HEATH SCIENCE</u> , (Lexington, Massachusetts, D. C. Heath and Company, 1981) pp 1-27	Humane Education, A Science Supplement K-3 Duval County Public Schools, 1981, p 12 <u>Films</u> Animals and their Homes- 9 min. Animals at Home in the Desert- 23 min. C. Animals of the Indian Jungle- 11 min. C. Animals of the South American Jungle- 26 min. C. Big Land Animals of North America- 11 min. C. Plants and Animals Depend on Each Other- 12 min. C.
1.2	Populations	7 days	28-55	<u>Films</u> Animal Babies Grow Up- 11 min. C. Living and Growing- 11 min. C. Living Things Depend on Each Other- 11 min. C. Plants and Animals Depend on Each Other- 12 min. C. Plant Life at Work- 11 min. C. Seeds Grow Into Plants- 7 min. C.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE - GRADE THREE

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
1.3	A Community	10 days	56-95	Elementary Social Studies, Duval County Public Schools, 1981, Grade Three 4.1.1. <u>Films</u> Food-Energy From the Sun- 9½ min. C. Food From the Sun- 9 min. C. Food Chains In the Ocean- 9 min. C. Nature's Ever Changing Communities- 14 min. C. Plants and Animals Depend On Each Other- 11 min. C. The Pond, A First Film- 10 min. C.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE - GRADE THREE

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
2.1	Water Cycle	14 days	96-139	<u>Films</u> The Earth, Its Water Cycle- 10½ min. C. Water For the City- 11 min. C. Water, Friend or Enemy- 16 min. C. Water Runs Downhill- 12 min. C. Water, Why It Is, What It Is?- 11 min. C.
2.2	Land Changes	8 days	140-175	<u>Films</u> Erosion- 10 min. C. Erosion-Leveling The Land- 14 min. C. Geology- A First Film- 10 min. C. Mountains: A First Film- 9 min. C. Our Round Earth: Its Land- 11 min. C.
2.3	Stars	7 days	176-207	<u>Films</u> Exploring The Moon- 16 min. C. Exploring The Night Sky- 10 min. C. How Many Stars- 11 min. C. Stars: A First Film- 12 min. C.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE - GRADE THREE

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
3.1	Machines at Work	8 days	208-235	Elementary Social Studies, Duval County Public Schools, 1981, Grade Three, 2.2.1 <u>Films</u> Keen Machines- 13 min. C. Machines Do Work- 10 min. C. Movement Exploration- 22 min. C. Movement Exploration-What Am I?- 11 min. C.
3.2	Electricity	8 days	236-259	Elementary Social Studies, Duval County Public Schools, 1981, Grade Three 2.4.2 Energy Conservation and Education in the Duval County School System, Duval County Public Schools, 1981 <u>Films</u> Electrical Safety- 12 min. C. Electricity- 13 min. C. Electricity-All About Us- 12 min. C. Electricity and How It Is Made- 16 min. C. Electricity, How to Make a Circuit- 11 min. C.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE - GRADE THREE

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
4.1	Nutrition	8 days	260-283	<u>Duval County Comprehensive Health Education Program, 1981</u> Grade Three-3-2.1.3 Grade Four-4-2.1.3 <u>The Dairy Council, Nutrition Kit, Level 3</u> <u>Films</u> Eat for Health- 8 min. C. Eating Right With Harv and Marv- 11 min. C. Eat Well, Grow Well- 11 min. C. Health-Food and Nutrition- 11 min. C. The Eating Feel Good Movie- 6 min. C.
4.2	Nutrition	7 days	284-305	<u>Duval County Comprehensive Health Education Program, 1981, Grade Three</u> <u>Films</u> Color of Heath- 12 min. C. Digestion in Our Bodies- 11 min. C. Eat for Health- 8 min. C. Nutritional Needs of Our Bodies- 10 min.

CORRELATION BETWEEN INSTRUCTIONAL MANAGEMENT SYSTEM (IMS) SKILLS
AND HEATH SCIENCE ACTIVITY SHEETS
SCIENCE - GRADE THREE

IMS NO.	HEATH ACTIVITY SHEET/DUPLICATING MASTER PAGE NUMBER
	<u>COMMUNICATIONS</u>
3.V.1	2, 10, 17, 26, 32, 45, 46, 54, 60, 66
3.V.5	10, 13, 17, 20, 27, 32, 40, 48, 60, 62, 67, 69
3.C.1	1, 3, 4, 5, 11, 14, 16, 18, 44, 61, 62
3.C.2	6, 13, 20, 21, 27, 28, 34, 35, 41, 47, 48, 53, 55, 62, 69, 70
3.C.3	7, 68
3.C.4	35
3.C.5	42, 63
3.C.6	15, 19, 22, 24, 29, 30, 31, 33, 37, 38, 39, 47, 50, 51, 52, 53, 58, 59, 64
3.C.7	15, 25, 29, 30, 33, 43, 52, 59
3.C.8	49, 52, 56
3.C.9	6, 14
3.C.10	70
3.W.2	2, 54
3.W.5	12, 37

CORRELATION BETWEEN INSTRUCTIONAL MANAGEMENT SYSTEM (IMS) SKILLS
AND HEATH SCIENCE ACTIVITY SHEETS

SCIENCE - GRADE THREE

IMS NO.	HEATH ACTIVITY SHEET/DUPLICATING MASTER PAGE NUMBER
	<u>MATHEMATICS</u>
3.P.4	8, 9, 23, 36, 65
3.N.7	12, 19
3.S.3	31

GRADE FOUR
COUNTY ADOPTED RESOURCES

- J. P. Barufaldi, et al, HEATH SCIENCE, (Lexington, Massachusetts, D. C. Heath and Company, 1981).
- J. P. Barufaldi, et al, HEATH SCIENCE, DUPLICATING MASTERS, (Lexington, Massachusetts, D. C. Heath and Company, 1981).
- J. P. Barufaldi, et al, HEATH SCIENCE, TEACHER'S RESOURCE BOOK, (Lexington, Massachusetts, D.C. Heath and Company, 1981).

HEATH SCIENCE KIT, Level Four

SUPPLEMENTARY RESOURCES

Tree Hill Curriculum Guide (Grade Four).

Forest Ecology Resource Guide (Duval County).

An Energy Learning Packet for Energy Conservation Awareness, Elementary Guide (Science and Environmental Studies Department, Duval County Schools).

82-83 Films, The Duval County School Board Educational Media Center.

ELEMENTARY SCIENCE SCOPE AND SEQUENCE
GRADE LEVEL: FOUR

- | | | |
|---------------|------------------|---|
| PRIMARY IDEA: | 1.0 | Insects are the largest group of animals in the world, both in number of species and in total numbers. |
| | SECONDARY IDEA: | 1.1 Insects have special features that enable them to live and survive in their habitat. |
| PRIMARY IDEA: | 2.0 | There is a close relationship between structure and function in both the physical and the biological worlds. |
| | SECONDARY IDEA: | 2.1 Machines lessen force necessary to do work. |
| PRIMARY IDEA: | 3.0 | The changes in states of matter affect the earth's atmosphere. |
| | SECONDARY IDEAS: | 3.1 Atoms are the building blocks of all matter.
3.2 Air is the mixture of gases that makes up the atmosphere and responds to physical changes. |
| PRIMARY IDEA: | 4.0 | The planets, moons, and asteroids are held in orbit by gravitational forces. |
| | SECONDARY IDEAS: | 4.1 Planets move in a predictable manner.
4.2 The solar system is a system consisting of the sun, the planets, their moons, asteroids, and comets. |
| PRIMARY IDEA: | 5.0 | Our planet's resources can be found in many different forms. |
| | SECONDARY IDEAS: | 5.1 The type and combination of minerals in a rock determine its classification.
5.2 In the presence of sunlight and chlorophyll, green plants are able to convert carbon dioxide and water to oxygen and sugar.
5.3 The resources of the earth are recycled. |
| PRIMARY IDEA: | 6.0 | All living things are interdependent with their environment. |
| | SECONDARY IDEA: | 6.1 Plants and animals are uniquely adapted to the variety of habitats provided in the forest. |

GRADE LEVEL: FourTHEME: Insects

PRIMARY IDEA: 1.0 Insects are the largest group of animals in the world, both in number of species and in total number.	
SECONDARY IDEA	OBJECTIVES
1.1 Insects have special features that enable them to live and survive in their habitat.	Given the proper materials and directions, the student will: 1.1.1 describe the characteristics of insects. 1.1.2 name and describe a variety of insects' habitats. 1.1.3 identify and describe stages in the life cycle of an insect. 1.1.4 identify and describe protective body features of insects. 1.1.5 explain the term social insect. 1.1.6 describe the functions of bees in a beehive. 1.1.7 describe how insect pests are controlled.

GRADE LEVEL: Four

THEME: Working Structures

PRIMARY IDEA: 2.0 There is a close relationship between structure and function in both the physical and the biological worlds.	
SECONDARY IDEA	OBJECTIVES
2.1 Machines lessen force necessary to do work.	Given the proper materials and directions, the student will: 2.1.1 identify force as a push or pull. 2.1.2 identify forces that cause things to move. 2.1.3 identify parts of six different machines. 2.1.4 describe how machines make work easier. 2.1.5 explain that friction occurs when two things rub against each other. 2.1.6 describe lubrication as a method used to reduce friction. 2.1.7 identify some ways in which friction is useful.

GRADE LEVEL: Four

THEME: Working Structures

PRIMARY IDEA: 2.0 There is a close relationship between structure and function in both the physical and the biological worlds.	
SECONDARY IDEA	OBJECTIVES
2.2 The structure of the body parts is related to the specific work performed by that part.	Given the proper materials and directions, the student will: 2.2.1 identify various bones in the body and describes their functions. 2.2.2 describe the external and internal features. 2.2.3 identify different kinds of joints and demonstrate their actions. 2.2.4 identify and describe cartilage. 2.2.5 observe and describe the action of muscles. 2.2.6 identify examples of involuntary muscles.

GRADE LEVEL: Four

THEME: Matter

PRIMARY IDEA: 3.0 The changes in state of matter affect the earth's atmosphere.	
SECONDARY IDEA	OBJECTIVES
3.1 Atoms are the building blocks of all matter.	Given the proper materials and directions, the student will: 3.1.1 identify the properties common to all matter. 3.1.2 describe the effect gravitation has on matter. 3.1.3 describe the motion of atoms and molecules in solids, liquids, and gases. 3.1.4 relate the speed of molecules to the relative temperature. 3.1.5 identify the state of matter of various objects. 3.1.6 explain some of the benefits of being able to change matter from one form to another.

GRADE LEVEL: Four

THEME: Matter

PRIMARY IDEA: 3.0 The changes in states of matter affect the earth's atmosphere.	
SECONDARY IDEA	OBJECTIVES
3.2 Air is the mixture of gases that makes up the atmosphere and responds to physical changes.	Given the proper materials and directions, the student will: 3.2.1 describe the earth's atmosphere and explain why it is necessary for life. 3.2.2 state that air has mass, takes up space, and is made of molecules. 3.2.3 name several gases in the atmosphere and state the importance of each. 3.2.4 define air pressure as the mass of air molecules on an object. 3.2.5 describe the effects of temperature and the amount of water vapor on air pressure. 3.2.6 describe the motion of air caused by differences in air pressure. 3.2.7 explain how the sun's heat can produce winds. 3.2.8 state ways to help keep the air less polluted.

GRADE LEVEL: Four

THEME: The Solar System

PRIMARY IDEA: 4.0 The planets, moons, and asteroids are held in orbit by gravitational forces.	
SECONDARY IDEA	OBJECTIVES
4.1 Planets move in a predictable manner.	Given the proper materials and directions, the student will: 4.1.1 describe the characteristics of a planet. 4.1.2 name and describe the two forces which interact and maintain the structure of the solar system. 4.1.3 define the term system. 4.1.4 define revolution and describe a year as one revolution of the earth. 4.1.5 define rotation and explain how it causes day and night. 4.1.6 describe how the earth's tilt and its revolution result in the seasons. 4.1.7 explain the reason why other planets are not always seen in the same position.

GRADE LEVEL: Four

THEME: The Solar System

PRIMARY IDEA: 4.0 The planets, moons, and asteroids are held in orbit by gravitational forces.	
SECONDARY IDEA	OBJECTIVES
4.2 The solar system is a system consisting of the sun, the planets, their moons, asteroids, and comets.	Given the proper materials and directions, the student will: 4.2.1 describe features unique to each planet in our solar system. 4.2.2 explain why, of all the planets, only earth seems to possess favorable conditions for life. 4.2.3 list the general location, features, and possible origin of asteroids. 4.2.4 identify and describe the distinguishing features of a comet.

GRADE LEVEL: Four

THEME: Earth

PRIMARY IDEA: 5.0 Our planet's resources can be found in many different forms.	
SECONDARY IDEA	OBJECTIVES
5.1 The type and combination of minerals in a rock determine its classification.	Given the proper materials and directions, the student will: 5.1.1 state that all rocks are made of at least one mineral. 5.1.2 explain the relationship between the rate of cooling and the crystal size of igneous rocks. 5.1.3 describe the conditions necessary for the formation of igneous, sedimentary, and metamorphic rocks. 5.1.4 name two varieties of each sedimentary, igneous, and metamorphic rock. 5.1.5 describe fossils and fossil formation. 5.1.6 identify the relationships between the three principal rock types through use of the rock cycle.

GRADE LEVEL: Four

THEME: Earth

PRIMARY IDEA: 5.0 Our planet's resources can be found in many different forms.	
SECONDARY IDEA	OBJECTIVES
5.2 In the presence of sunlight and chlorophyll, green plants are able to convert carbon dioxide and water to oxygen and sugar.	Given the proper materials and directions, the student will: 5.2.1 describe the process of photosynthesis and explain its importance. 5.2.2 describe the structure and function of roots, stems, and leaves. 5.2.3 describe the structure and function of a flower. 5.2.4 describe the process of pollination and explain its importance. 5.2.5 identify the seed and ovary of a variety of fruits.

GRADE LEVEL: Four

THEME: Earth

PRIMARY IDEA: 5.0 Our planet's resources can be found in many different forms.

SECONDARY IDEA

OBJECTIVES

5.3 The resources of the earth are recycled.

Given the proper materials and directions, the student will:

- 5.3.1 describe the role of resources in his or her life.
- 5.3.2 contrast renewable with nonrenewable resources and provide examples of each.
- 5.3.3 tell how coal, oil, petroleum, and natural gas are formed, recovered, and used.
- 5.3.4 define the meaning of the term ore and describe one way an ore may be formed.
- 5.3.5 describe how the short life cycles of some organisms make them valuable renewable resources.
- 5.3.6 explain the relationship between the activities of people and the supplies of various natural resources.

GRADE LEVEL: Four

THEME: Habitat/Adaptation

PRIMARY IDEA: 6.0 All living things are interdependent with their environment.	
SECONDARY IDEA	OBJECTIVES
6.1 Plants and animals are uniquely adapted to the variety of habitats provided in the forest.	Given the proper materials and directions, the student will: 6.1.1 state that a habitat is a place where an animal is usually found. 6.1.2 identify food, water, and shelter as the three things that are found in a habitat. 6.1.3 Describe the habitat of a forest animal. 6.1.4 name some common animals and their habitats. 6.1.5 identify at least three plants found in a forest habitat. 6.1.6 Define the word adaptation. 6.1.7 identify protection and survival as reasons for adapting. 6.1.8 state that plants and animals have special adaptations which help them survive in certain habitats. 6.1.9 describe an adaptation for certain common forest animals.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE FOUR

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
1.1	The Insect World	9 days	J.P. Barufaldi, et al, <u>Heath Science</u> , (Lexington, Massachusetts, D.C. Heath and Co., 1981) 2-39.	<u>Tree Hill Curriculum Guide</u> <u>Films</u> First Film on Insects- 11 min. C. Flies and Mosquitoes: Their Life Cycle and Control- 10 min. B&W Insect Foods- 14 min. C. Insect Metamorphosis- 15 min. C. Insects That Help Us- 10½ min. C. Insects- 11 min. C. Social Insects- 14 min. C. Secrets of the Ant and Insect World- 13 min. C.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE FOUR

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
2.1	Machines and Force	10 days	42-77	<u>Films</u> Keen Machines- 13 min. C. Machines Do Work- 10 min. B&W Simple Machines: Inclined Planes- 5 min. C.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE FOUR

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
3.1	Matter	9 days	110-139	<u>Films</u> Explaining Matter: Atoms and Molecules- 13 min. C. Gravity-How It affects Us- 14 min. C. Matter, Matter Everywhere: Its Smallest Parts- 13 min. C. Solids, Liquids, and Gases- 10 min. B&W Explaining Matter: Molecules in Motion- 11 min. B&W
3.2	The Earth's Atmosphere	12 days	140-177	<u>Films</u> Studying Gravitation and Mass- 16 min. C. Air All Around- 8 min. C. How Air Helps Us- 11 min. C.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE FOUR

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
4.1	The Solar System	7 days	180-205	<u>Films</u> The Earth In Motion- 12 min B&W Planetary Motions and Space Travel- 10 min. C.
4.2	Traveling Through the Solar System	7 days	206-241	<u>Films</u> Asteroids, Comets, and Meteorites- 11 min. C. Beyond the Moon- 10 min. C. Trip to the Planets- 15 min. B&W

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE FOUR

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
5.1	The Earth's Rocks	8 days	244-273	<u>Films</u> Rocks for Beginners- 16 min. C. Strata: The Earth's Changing Crust- 10 min. C. Understanding Our Earth, Rocks and Minerals- 11 min. C. Volcanoes: Exploring the Restless Earth- 18 min. C. Fossils Are Interesting- 10 min. C.
5.2	Sunlight and Green Plants	7 days	274-297	<u>Tree Hill Curriculum Guide</u> <u>Forest Ecology Resource Guide</u> <u>Films</u> Flowers at Work- 11 min. C. Green Plants and Sunlight- 11 min C. How Flowers Make Seeds- 11 min. C. How Green Plants Make and Use Food- 11 min. B&W Nature's Food Chain- 14 min. C.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE FOUR

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
5.3	The Earth's Resources	9 days	298-335	<u>An Energy Learning Packet for Energy Conservation Awareness Elementary Guide</u> <u>Films</u> Energy for the Future- 15 min. C. The Electric Story: Coal- 19 min. C. Energy: The Problem of the Future- 23 min. C.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE FOUR

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
6.0	Habitat/ adaptation	8 days		<u>Tree Hill Curriculum Guide</u> <u>Forest Ecology Resource Guide</u> <u>Films</u> Adapting to Changes in Nature- 10 min. C Changing Forest: A First Film- 11 min. C. Ecology of Forests- 8 min. C. Life on the Forest Floor: A First Film- 9 min. C. Forest In Home to Wildlife- 11 min. C.
GRAND TOTAL TEACHING TIME: 17 wks. and 1 day				

CORRELATION BETWEEN INSTRUCTIONAL MANAGEMENT SYSTEM (IMS) SKILLS
AND HEATH SCIENCE ACTIVITY SHEETS

GRADE FOUR

IMS NO.	HEATH ACTIVITY SHEET/DUPLICATING MASTER PAGE NUMBER
	<u>COMMUNICATIONS</u>
4.V.1	2, 4, 10, 11, 13, 19, 20, 24, 31, 34, 36, 40, 44, 54, 61, 68
4.V.5	2, 13, 20, 27, 34, 37, 40, 54, 61
4.C.1	14, 64, 66
4.C.2	2, 6, 13, 20, 21, 26, 27, 35, 37, 41, 48, 49, 53, 55, 62, 69
4.C.3	7, 30, 37, 46, 60
4.C.4	28, 52
4.C.5	56
4.C.6	1, 3, 9, 12, 16, 17, 22, 23, 29, 39, 46, 47, 50, 51, 57, 58
4.C.7	5, 9, 15, 16, 17, 22, 23, 29, 30, 32, 33, 38, 51, 57, 58
4.C.8	5, 15, 22, 23, 25, 30, 32, 33, 35, 38, 39, 42, 51, 57, 58, 60, 64
4.C.9	14, 15, 17, 22, 23, 26, 33, 35, 38, 39, 43, 45, 46, 50, 51, 57, 58, 64, 65, 66, 67, 70
4.C.10	63
4.W.1	11, 38, 52, 53
4.W.2	38, 52, 53
4.W.4	11

CORRELATION BETWEEN INSTRUCTIONAL MANAGEMENT SYSTEM (IMS) SKILLS

AND HEATH SCIENCE ACTIVITY SHEETS

GRADE FOUR (continued)

IMS NO.	HEATH ACTIVITY SHEET/DUPLICATING MASTER PAGE NUMBER
	<u>COMMUNICATIONS</u>
4.W.7	11, 38, 52, 53
4.W.8	38, 52, 53
4.W.10	70
4.W.13	11, 38, 52, 53
4.S.2	24, 31, 44
4.S.3	2, 5, 10, 25, 36, 48, 52, 60, 64, 65, 66
4.S.4	5, 14, 15, 23, 37, 43, 45, 59, 67
	<u>MATHEMATICS</u>
4.N.5	67

GRADE FIVE
COUNTY ADOPTED RESOURCES

- J. P. Barufaldi, et al, HEATH SCIENCE, (Lexington, Massachusetts, D. C. Heath and Company, 1981).
- J. P. Barufaldi, et al, HEATH SCIENCE, DUPLICATING MASTERS, (Lexington, Massachusetts, D. C. Heath and Company, 1981).
- J. P. Barufaldi, et al, HEATH SCIENCE, TEACHER'S RESOURCE BOOK (Lexington, Massachusetts, D. C. Heath and Company, 1981).

HEATH SCIENCE KIT, Level Five

SUPPLEMENTARY RESOURCES

- Duval County Comprehensive Health Education Program (Grade Five).
- Marine Science Education Center Guidebook for Fifth Grade (Duval County School System, 1975).
- 82-83 Films, The Duval County School Board Educational Media Center.
- An Energy Learning Packet for Energy Awareness Elementary Guide (Science and Environmental Studies Department, Duval County Schools).
- Energy Conservation and Education in the Duval County School System Resource Guide.

ELEMENTARY SCIENCE SCOPE AND SEQUENCE
GRADE LEVEL: FIVE

PRIMARY IDEA:	1.0	Living things are composed of cells and are adapted by structure and function to their environment.
	SECONDARY IDEAS:	
	1.1	Animals respond to their environment through behavior which is either inborn or learned.
	1.2	The cell is the basic unit of most living things.
PRIMARY IDEA:	2.0	Matter can be measured and is affected by heat.
	SECONDARY IDEAS:	
	2.1	Matter has mass and takes up space.
	2.2	The amount of heat energy in matter depends on how rapidly its particles are moving and how many particles are present.
PRIMARY IDEA:	3.0	Slow geological forces and more rapid meteorological forces shape the earth and its climate.
	SECONDARY IDEAS:	
	3.1	Geological features of the earth can be affected by earthquakes, volcanoes, and continental drift.
	3.2	Weather can be defined in terms of temperature, humidity, dew point, clouds, and precipitation.
	3.3	Measurement of air pressure and winds and tracking of air masses aid in accurate weather prediction.
PRIMARY IDEA:	4.0	Because of advanced life support systems, man is exploring the oceans and traveling in space.
	SECONDARY IDEAS:	
	4.1	Features of the ocean and ocean bottom include waves, currents, mineral salts, ridges, and plains.
	4.2	A diversity of marine life can be found in the oceans' communities.
	4.3	The moon has an effect on life on earth.
PRIMARY IDEAS:	5.0	The systems of the body work together to maintain a delicate internal balance of good health.
	SECONDARY IDEAS:	
	5.1	The human body is well adapted to carry on life functions.
	5.2	The choices of the consumer will affect his/her potential development.

GRADE LEVEL: FiveTHEME: Living Things

PRIMARY IDEA: 1.0 Living things are composed of cells and are adapted by structure and function to their environment.	
SECONDARY IDEA	OBJECTIVES
1.1 Animals respond to their environment through behavior which is either inborn or learned.	Given the proper materials and directions, the student will: 1.1.1 observe and describe the behavior of various animals. 1.1.2 describe examples of learned and inborn behavior. 1.1.3 identify changes in the environment that cause animals to respond. 1.1.4 identify and describe ways animals communicate with each other. 1.1.5 describe experiments dealing with conditioning, imprinting, and trial and error learning. 1.1.6 state that humans learn in a variety of ways.

GRADE LEVEL: Five

THEME: Living Things

PRIMARY IDEA: 1.0 Living things are composed of cells and are adapted by structure and function to their environment.	
SECONDARY IDEA	OBJECTIVES
1.2 The cell is the basic unit of most living things.	Given the proper materials and directions, the student will: 1.2.1 state that living things are made of cells. 1.2.2 identify and describe basic parts of a cell. 1.2.3 describe the functions of the cell membrane. 1.2.4 define the process of cell division. 1.2.5 observe and describe one-celled and multicellular organisms. 1.2.6 identify and describe functions of tissues and organs.

GRADE LEVEL: Five

THEME: Matter and Energy

PRIMARY IDEA: 2.0 Matter can be measured and is affected by heat.	
SECONDARY IDEA	OBJECTIVES
2.1 Matter has mass and takes up space.	Given the proper materials and directions, the student will: 2.1.1 explain why standard units of measure are necessary. 2.1.2 define mass, weight, volume, and density. 2.1.3 identify the meter, gram, newton, and liter, as basic metric units of measure. 2.1.4 differentiate between mass and weight. 2.1.5 calculate the volume of an object. 2.1.6 calculate the density of an object. Special Note: IMS Math Skills 5.M.3, 5.M.4, and 5.M.5 correlate well with this unit.

GRADE LEVEL: Five

THEME: Matter and Energy

PRIMARY IDEA: 2.0 Matter can be measured and is affected by heat.	
SECONDARY IDEA	OBJECTIVES
2.2 The amount of heat energy in matter depends on how rapidly its particles are moving and how many particles are present.	Given the proper materials and directions, the student will: 2.2.1 define heat as a form of energy which results in particle movement. 2.2.2 describe the effects which adding and taking away heat energy has on a certain amount of substance. 2.2.3 explain how heat energy can be transferred by conduction and convection. 2.2.4 state the metals are usually good conductors of heat energy and nonmetals are usually poor conductors. 2.2.5 contrast the temperature of an object with the thermal energy of the object. 2.2.6 define thermometer and describe how it works. 2.2.7 state that the amount of heat that must be supplied in order to change the temperature depends on the mass and the kind of substance. 2.2.8 list some sources of heat energy. 2.2.9 list some uses of heat energy in our everyday lives. 2.2.10 explain how our future energy supply depends on new sources and wise use.

GRADE LEVEL: Five

THEME: Earth and Weather

PRIMARY IDEA: 3.0 Slow geological forces and more rapid meteorological forces shape the earth and its climate.	
SECONDARY IDEA	OBJECTIVES
3.1 Geological features of the earth can be affected by earthquakes, volcanoes, and continental drift.	Given the proper materials and directions, the student will: 3.1.1 name and describe the principal interior layers of the earth. 3.1.2 identify the cause of earthquakes. 3.1.3 describe how earthquake energy travels through earth materials. 3.1.4 state the use of seismographs. 3.1.5 identify locations in the world which experience the greatest number of volcanoes and earthquakes. 3.1.6 relate the processes which result in the formation of a volcanic cone. 3.1.7 describe the theory of continental drift. 3.1.8 describe the relationship between drifting plates and geological features and events.

GRADE LEVEL: Five

THEME: Earth and Weather

PRIMARY IDEA: 3.0 Slow geological forces and more rapid meteorological forces shape the earth and its climate.	
SECONDARY IDEA	OBJECTIVES
3.2 Weather can be defined in terms of temperature, humidity, dew point, clouds, and precipitation.	Given the proper materials and directions, the student will: 3.2.1 define the term weather. 3.2.2 identify the conditions that affect the temperature of the air. 3.2.3 state what humidity is and how it is measured. 3.2.4 define dew point and describe its relationship to the formation of dew, frost, fog, and cloud. 3.2.5 describe several kinds of clouds. 3.2.6 define precipitation and describe the various forms it takes.

GRADE LEVEL: Five

THEME: Earth and Weather

PRIMARY IDEA: 3.0 Slow geological forces and more rapid meteorological forces shape the earth and its climate.

SECONDARY IDEA

OBJECTIVES

3.3 Measurement of air pressure and winds, and tracking of air masses aid in accurate weather prediction.

Given the proper materials and directions, the student will:

3.3.1 relate changes in air pressure and temperature

3.3.2 describe the function of a barometer.

3.3.3 state what causes winds and name the instruments used to determine wind speed and direction.

3.3.4 describe the nature and formation of air masses and their relationship to fronts.

3.3.5 identify several activities involved in the reporting and forecasting of weather.

GRADE LEVEL: Five

THEME: Exploration

PRIMARY IDEA: 4.0 Because of advanced life support systems, man is exploring the oceans and traveling in space.

SECONDARY IDEA	OBJECTIVES
4.1 Features of the ocean and ocean bottom include waves, currents, mineral salts, tides, and plains.	Given the proper materials and directions, the student will: 4.1.1 state how much of the earth's surface is covered by ocean water. 4.1.2 identify breathing, movement, and pressure as problems faced by ocean explorers and describe how each was solved. 4.1.3 identify the source of matter in ocean water and on the bottom. 4.1.4 tell how ocean waves are formed and list examples of the relationships between energy and waves. 4.1.5 identify the cause of many ocean currents. 4.1.6 locate and describe the features associated with continental margins and the ocean floor. 4.1.7 identify some of the resources found in the ocean and discuss the problems in developing them.

GRADE LEVEL: Five

THEME: Exploration

PRIMARY IDEA: 4.0 Because of advanced life support systems, man is exploring the oceans and traveling in space.

SECONDARY IDEA

4.2 A diversity of marine life can be found in the oceans' communities.

OBJECTIVES

Given the proper materials and directions, the student will:

- 4.2.1 describe some ocean-dwelling organisms and give examples of the variety of their adaptations to their environment.
- 4.2.2 explain the importance of plankton in the ocean community.
- 4.2.3 describe the plants and animals found in the tidal zone, the continental shelf, the open sea, and a coral reef.
- 4.2.4 give examples of oceanic food chains.
- 4.2.5 identify some of the important considerations in using the ocean's natural resources.

GRADE LEVEL: Five

THEME: Exploration

PRIMARY IDEA: 4.0 Because of advanced life support systems, man is exploring the ocean and traveling in space.

SECONDARY IDEA	OBJECTIVES
4.3 The moon has an effect on life on earth.	Given the proper materials and directions, the student will: 4.3.1 describe how rocket engines enable a spacecraft to leave the earth's surface. 4.3.2 state some problems of space exploration. 4.3.3 identify the moon's phases and the cause of these apparent changes in the lighted portion of the lunar surface. 4.3.4 explain the conditions necessary for both solar and lunar eclipses. 4.3.5 describe the effects of the moon's and sun's gravitational pull on the earth's oceans. 4.3.6 describe the principal surface features of the moon. 4.3.7 identify moons, cloud cover, and surface as discoveries made by spacecraft investigating the planets Mars, Jupiter, and Venus. 4.3.8 define the term galaxy and describe the Milky Way.

GRADE LEVEL: Five

THEME: The Human Body

PRIMARY IDEA: 5.0 The systems of the body work together to maintain a delicate internal balance of good health.	
SECONDARY IDEA	OBJECTIVES
5.1 The human body is well adapted to carry on life functions.	Given the proper materials and directions, the student will: 5.1.1 identify the structures and functions of the circulatory, respiratory, excretory, nervous, and endocrine systems. 5.1.2 describe the flow of blood through the heart and circulatory system. 5.1.3 trace the path of air through the respiratory system. 5.1.4 describe the path of impulses through the nervous system. 5.1.5 describe the methods by which the excretory system rids the body of liquid and solid wastes. 5.1.6 state the role of glands in the endocrine system.

GRADE LEVEL: Five

THEME: The Human Body

PRIMARY IDEA: 5.1 The systems of the body work together to maintain a delicate internal balance of good health.	
SECONDARY IDEA	OBJECTIVES
5.2 The choices of the consumer will affect his/her potential development.	Given the proper materials and directions, the student will: 5.2.1 discuss health decisions he or she must make regularly. 5.2.2 describe the body's nutritional needs. 5.2.3 define the term kilocalorie and describe a technique for measuring the calorie content of foods. 5.2.4 describe how bacteria and viruses can enter the body and cause disease. 5.2.5 describe the body's natural defenses against disease causing germs. 5.2.6 describe how antibiotics and vaccines are effective against germs. 5.2.7 describe the effects of alcohol, cigarette smoking, and other habit-forming drugs on the body.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE FIVE

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
1.1	Animal Behavior	10 days	J. P. Barufaldi, et al, <u>HEATH SCIENCE</u> , (Lexington, Massachusetts, D.C. Heath and Co., 1981) 2-27.	<u>Films</u> Animal Adaptation in a Northern Environment- 11½ min. C. Animal Communication- 30 min. C. Animal Navigation- 14 min. C.
1.2	Cells	9 days	28-53	<u>Duval County Comprehensive Health Education Program</u> (Transparency A, p. 37) <u>Films</u> The Cell-Structural Unit of Life- 10 min. C. Cells and What They Do- 11 min. C.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE FIVE

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
2.1	Matter	7 days	54-77	<u>Films</u> Meter, Liter, Gram- 13 min. C. Meters, Liters, and Kilograms- 23 min. C. Matter, Matter Everywhere: Its Smallest Parts- 13 min. C.
2.2	Heat Energy	10 days	78-107	<u>Films</u> Energy for the future- 15 min. C. Energy: New Sources- 20 min C. Energy: The Problem of the Future- 23 min. C. Heat-Molecules in Motion- 11 min. C. <u>Guides</u> <u>An Energy Learning Packet for Energy Awareness Elementary Guide</u> (Environmental Education Department, Duval County Schools) <u>Energy Conservation and Education in the Duval County School System Resource Guide</u>

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE FIVE

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
3.1	The Changing Earth	9 days	108-141	<u>Films</u> Earthquake- 14 min. C. Volcanoes, Earthquakes, and Other Earth Movements- 16 min. C. Strata: The Earth's Changing Crust- 10 min. C. The Atlantis Connection- 20 min. C. The Earth in Change- The Earth's Crust-16 min. B&W <u>Films</u> The Unchained Goddess, Part I and II- 60 min. C. The Clouds Above- 10 min. C. Basics of Weather- 16 min. C. <u>Films</u> Weather Forecasting- 22 min. C. The Weather Watchers- 30 min. C. Winds and Their Causes- 11 min. C. What Makes Weather? (1963)- 14 min. C. What Makes Weather? 2nd Edition (1981)- 14 min. C.
3.2	Weather Measurement	8 days	142-163	
3.3	Weather Prediction	6 days	164-187	

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE FIVE

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
4.1	The Earth's Ocean	9 days	188-221	<u>Marine Science Education Center Guidebook for Fifth Grade</u> <u>Films</u> What's Under the Ocean?- 14 min. C. Oceanography: Science of the Sea- 11 min. C. Earth: Coastlines- 11 min. C. Ocean Tides-Bay of Fundy- 14 min. B&W The Restless Sea, Part I and II- 60 min. C.
4.2	Life in the Ocean	10 days	222-253	<u>Marine Science Education Center Guidebook for Fifth Grade</u> <u>Films</u> The Ocean: A First Film- 11 min. C. Life Between the Tides- 20 min. C. Life in the Ocean- 17 min. C. Secrets of the Underwater World- 16 min. C. Mysteries of the Deep- 24 min. C.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE FIVE

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
4.3	The Moon and Space Exploration	10 days	254-285	<u>Films</u> Moon-Adventure in Space- 16 min. C. Exploring Space-The Moon and How It Affects Us- 18 min. C. Exploring the Moon- 16 min. C. How Man Travels Through Space- 12 min. B&W What is an Eclipse? - 11 min. C.
GRAND TOTAL	TEACHING TIME: 17 weeks 3 days			

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE FIVE

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
5.1	Human Body Systems		These topics are already included in the 5th grade Duval County Comprehensive Health Education Program (See Course Outline p. VIII)	Everything is included in the health guide.
5.2	Making Choices About Your Body's Needs			
GRAND TOTAL TEACHING TIME: 17 wks. 3 days.				

CORRELATION BETWEEN INSTRUCTIONAL MANAGEMENT SYSTEM (IMS) SKILLS
AND HEATH SCIENCE ACTIVITY SHEETS

GRADE FIVE

IMS NO.	HEATH ACTIVITY SHEET/DUPLICATING MASTER PAGE NUMBER
	<u>COMMUNICATIONS</u>
5.V.1	5, 12, 13, 17, 18, 26, 31, 32, 38, 46, 53, 54, 60, 68, 72, 73, 74, 75, 82
5.V.5	5, 12, 17, 18, 26, 31, 32, 38, 46, 54, 60, 68, 72, 73, 74, 75, 82
5.C.1	5, 31, 38, 75
5.C.2	1, 6, 9, 11, 12, 13, 20, 27, 28, 29, 34, 35, 38, 41, 45, 48, 55, 59, 62, 67, 69, 73, 74, 76, 83
5.C.3	7, 58, 63, 64, 66
5.C.4	21
5.C.5	49
5.C.6	4, 8, 10, 19, 22, 24, 25, 36, 43, 44, 51, 52, 71, 80, 81
5.C.7	2, 25, 39, 40, 42, 43, 45, 47, 50, 51, 66, 70, 71, 80, 81, 84
5.C.8	24, 25, 28, 36, 39, 40, 42, 43, 44, 45, 47, 51, 63, 64, 80, 84
5.C.9	2, 4, 9, 10, 11, 14, 15, 16, 17, 22, 24, 25, 28, 29, 30, 36, 38, 39, 40, 44, 45, 47, 50, 51, 56, 59, 66, 67, 71, 74, 75, 78, 80, 81
5.C.10	56, 63
5.W.1	3, 15, 16, 22, 23, 42, 50, 53, 58, 61, 67, 80
5.W.7	7, 3, 11, 15, 16, 22, 23, 42, 50, 53, 58, 61, 67, 80

CORRELATION BETWEEN INSTRUCTIONAL MANAGEMENT SYSTEM (IMS) SKILLS

AND HEATH SCIENCE ACTIVITY SHEETS

GRADE FIVE (continued)

IMS NO.	HEATH ACTIVITY SHEET/DUPLICATING MASTER PAGE NUMBER
	<u>COMMUNICATIONS</u>
5.W.9	1, 3, 11, 15, 16, 22, 23, 42, 50, 53, 58, 61, 67, 80
5.S.4	5, 9, 11, 30, 31, 39, 40, 44, 45, 53, 55, 58, 67, 72, 73, 79
5.S.5	2, 14, 24, 25, 29, 36, 37, 44, 45, 47, 52, 59, 64, 65, 66, 67, 71, 78, 81

GRADE SIX
COUNTY ADOPTED RESOURCES

- J. P. Barufaldi, et al, HEATH SCIENCE, (Lexington, Massachusetts, D. C. Heath and Company, 1981).
- J. P. Barufaldi, et al, HEATH SCIENCE, DUPLICATING MASTERS (Lexington, Massachusetts, D. C. Heath and Company, 1981).
- J. P. Barufaldi, et al, HEATH SCIENCE, TEACHER'S RESOURCE BOOK (Lexington, Massachusetts, D. C. Heath and Co., 1981).

HEATH SCIENCE KIT, Level Six

SUPPLEMENTARY RESOURCES

Tree Hill Curriculum Guide (Grade Six)

What's Watt: Florida Energy Educational Curriculum (Tampa, Fla., Florida Electric Power Coordinating Group, 1980).

An Energy Learning Packet for Energy Conservation Awareness Elementary Guide (Environmental Education Department, Duval County Schools).

Energy Conservation and Education in the Duval County School System Resource Guide for Teachers, Administration, and Staff.

R. S. Bednarz, et al, The World-Now and Then (Chicago: Rand McNally and Company, 1980).

Forest Ecology Resource Guide (Duval County).

Duval Count Comprehensive Health Education Program (Grade Six).

82-83 Films, The Duval County School Board Educational Media Center.

ELEMENTARY SCIENCE SCOPE AND SEQUENCE
GRADE LEVEL: SIX

- PRIMARY IDEA: 1.0 Living things may be classified in terms of common properties.
- SECONDARY IDEAS:
- 1.1 Vertebrates are animals with a spinal cord enclosed in a backbone.
 - 1.2 Invertebrates are animals without backbones.
 - 1.3 There are two major groups of plants - those that make seeds and those that do not.
 - 1.4 Growth and reproduction are characteristics of living things.
- PRIMARY IDEA: 2.0 The interaction of matter involves energy and causes change.
- SECONDARY IDEAS:
- 2.1 All matter can be classified into three general categories: elements (atoms of the same kind), compounds (two or more elements which are chemically combined), and mixtures (of solids, liquids, and gases).
 - 2.2 Electricity is a form of energy which has a magnetic field around it.
 - 2.3 Energy can be classified into two categories: renewable and nonrenewable.
- PRIMARY IDEA: 3.0 Communication relies on such forms of energy, as light, sound, and electric current.
- SECONDARY IDEAS:
- 3.1 Light is a form of radiant energy of different wavelengths and can be refracted or reflected.
 - 3.2 The eyes are sense organs that react to light.
 - 3.3 Advanced technology has furthered man's ability to communicate.
- PRIMARY IDEA: 4.0 All living things are interdependent among themselves and their environment.
- SECONDARY IDEA: 4.1 Living things need energy from food to grow and to stay alive.
- PRIMARY IDEA: 5.0 Because of the increasingly widespread use of computers in our society, it is important to become aware of their application and function.
- SECONDARY IDEAS:
- 5.1 A computer has four basic functions: input, process, memory, and output.

SECONDARY IDEAS:

5.2

Earlier inventions led to the development of computers.

5.3

Computers have a broad variety of applications but have inherent limitations.

GRADE LEVEL: Six

THEME: Living Things

PRIMARY IDEA: 1.0 Living things may be classified in terms of common properties.	
SECONDARY IDEAS	OBJECTIVES
1.1 Vertebrates are animals with a spinal cord enclosed in a backbone.	Given proper materials and directions, the student will: 1.1.1 explain the importance of classification. 1.1.2 discuss criteria used in determining whether something is living. 1.1.3 state that structure is a basis for scientific classification. 1.1.4 distinguish between vertebrates and invertebrates. 1.1.5 observe, compare, and describe characteristics of fish, amphibians, reptiles, birds, and mammals. 1.1.6 describe the life cycle of a frog. 1.1.7 discuss adaptive features of reptile and bird eggs. 1.1.8 define the concepts warm-blooded and cold-blooded. 1.1.9 describe the adaptations of birds' feet and bills.

GRADE LEVEL: Six

THEME: Living Things

PRIMARY IDEA: 1.0 Living things may be classified in terms of common properties.	
SECONDARY IDEAS	OBJECTIVES
1.2 Invertebrates are animals without backbones.	Given proper materials and directions, the student will: 1.2.1 define the term invertebrate. 1.2.2 identify and describe characteristics of various arthropods. 1.2.3 describe characteristics of mollusks and echinoderms. 1.2.4 describe characteristics of worms, jellyfish, and sponges. 1.2.5 describe similarities and differences among the protists. 1.2.6 name the three shapes of bacteria.

GRADE LEVEL: Six

THEME: Living Things

PRIMARY IDEA: 1.0 Living things may be classified in terms of common properties.	
SECONDARY IDEA	OBJECTIVES
1.3 There are two major groups of plants - those that make seeds and those that do not.	Given the proper materials and directions, the student will: 1.3.1 identify two groups of plants. 1.3.2 discuss the formation of seeds in a flower. 1.3.3 identify and describe such parts of monocot and dicot plants as leaves, stems, and flowers to show their differences. 1.3.4 describe characteristics of conifers. 1.3.5 describe characteristics of ferns, mosses, and fungi. 1.3.6 describe the life cycles of ferns, mosses, and bread molds. 1.3.7 discuss the history of plants on the earth.

GRADE LEVEL: Six

THEME: Living Things

PRIMARY IDEA: 1.0 Living things may be classified in terms of common properties.	
SECONDARY IDEA	OBJECTIVES
1.4 Growth and reproduction are characteristic of living things.	Given the proper materials and directions, the student will: 1.4.1 name the changes that humans and specific insects go through in their life cycles. 1.4.2 state that living organisms need new cells for growth and repair. 1.4.3 describe cell growth and division. 1.4.4 explain the relationship between chromosomes and genes in the cell nucleus. 1.4.5 describe the processes of regeneration and budding. 1.4.6 identify animals that can regenerate and bud. 1.4.7 state that meiosis is a kind of cell division that reduces the number of chromosomes by half. 1.4.8 state that genes control the inheritance of traits.

GRADE LEVEL: Six

THEME: Matter and Energy

PRIMARY IDEA: 2.0 The interaction of matter involves energy and causes change.	
SECONDARY IDEAS	OBJECTIVES
2.1 All matter can be classified into three general categories: elements (atoms of the same kind), compounds (elements that undergo chemical reactions), and mixtures (solids, liquids, and gases).	Given proper materials and directions, the student will: 2.1.1 state that all matter is made of tiny parts called atoms. 2.1.2 identify the principal parts of an atom and describe their relationship to one another. 2.1.3 contrast the different states of matter in terms of molecular motion. 2.1.4 describe the conditions under which a mixture may be produced. 2.1.5 compare elements and compounds. 2.1.6 state the purpose of chemical symbols and formulas. 2.1.7 compare chemical and physical changes. 2.1.8 state the function of group tests. 2.1.9 give examples of how chemistry can affect one's own life.

GRADE LEVEL: Six

THEME: Matter and Energy

PRIMARY IDEA: 2.0 The interaction of matter involves energy and causes change.	
SECONDARY IDEA	OBJECTIVES
2.2 Electricity is a form of energy which has a magnetic field around it.	Given the proper materials and directions, the student will: 2.2.1 describe the changes associated with protons, neutrons, and electrons. 2.2.2 identify the conditions under which static electricity is produced. 2.2.3 state the conditions that must exist for charged objects to repel or attract each other. 2.2.4 describe the relationship between an electric current and a magnetic field. 2.2.5 describe the structure of a simple electromagnet. 2.2.6 state the basic structure and function of a battery. 2.2.7 Describe a closed circuit and tell how an electrical switch is used. 2.2.8 compare good and poor electrical conductors.

GRADE LEVEL: Six

THEME: Matter and Energy

PRIMARY IDEA: 2.0 The interaction of matter involves energy and causes change.	
SECONDARY IDEAS	OBJECTIVES (continued)
2.2 Electricity is a form of energy which has a magnetic field around it.	2.2.9 describe how fuses and circuit breakers protect against the damage that can be caused by short circuits. 2.2.10 compare the flow of electric current in alternating and direct currents.

GRADE LEVEL: Six

THEME: Matter and Energy

PRIMARY IDEA: 2.0 The interaction of matter involves energy and causes change.	
SECONDARY IDEAS	OBJECTIVES
2.3 Energy can be classified into two categories: renewable and nonrenewable.	Given the proper materials and directions, the student will: 2.3.1 define energy. 2.3.2 state that in order to work, energy must be transferred. 2.3.3 describe the law of conservation of mass-energy. 2.3.4 relate what happens during oxidation. 2.3.5 identify our current major fuels and tell how they were formed. 2.3.6 describe the process of fission to produce nuclear energy. 2.3.7 identify alternative energy sources that can be used in place of fossil fuels. 2.3.8 describe some major benefits of conserving nonrenewable resources.

GRADE LEVEL: Six

THEME: Communications

PRIMARY IDEA: 3.0 Communication relies on various forms of energy, such as light, sound, and electric current.	
SECONDARY IDEAS	OBJECTIVES
3.1 Light is a form of radiant energy of different wavelengths and can be reflected or refracted.	Given the proper materials and directions, the student will: 3.1.1 identify several light sources. 3.1.2 describe a photon and tell how it is produced. 3.1.3 compare and contrast the behavior of light as it was described in the past with today's notion of how light behaves. 3.1.4 describe how light travels - its path, and speed. 3.1.5 distinguish among transparent, translucent, and opaque objects. 3.1.6 describe the characteristics of mirrors. 3.1.7 define refraction of light and tell why it occurs. 3.1.8 describe the behavior of light when it is passed through a prism. 3.1.9 explain why an object has a certain color.

GRADE LEVEL: Six

THEME: Communications

PRIMARY IDEA: 3.0 Communication relies on various forms of energy, such as light, sound and electric current.	
SECONDARY IDEAS	OBJECTIVES
3.2 The eyes are sense organs that react to light.	Given proper materials and directions, the student will: 3.2.1 discuss sight as one of our most important senses. 3.2.2 identify the parts of the eye and describe their corresponding functions. 3.2.3 compare the lens in the eye to a glass lens. 3.2.4 describe the role of the brain in making sight possible. 3.2.5 state the causes of nearsightedness and farsightedness and discuss lenses used for correction. 3.2.6 explain how to practice good eye care.

GRADE LEVEL: SixTHEME: Communications

PRIMARY IDEA: 3.0 Communication relies on various forms of energy, such as light, sound, and electric current.	
SECONDARY IDEA	OBJECTIVES
3.3 Advanced technology has furthered man's ability to communicate.	Given the proper materials and directions, the student will: 3.3.1 identify ways people communicated with each other in the past. 3.3.2 explain how the use of the printing press increased the range of communications among people. 3.3.3 describe how a telephone works. 3.3.4 tell how a phonograph works. 3.3.5 relate how sounds can be recorded on magnetic tape. 3.3.6 locate infrared and ultraviolet radiation, x-rays, and radio waves with respect to the visible spectrum and identify some of their uses. 3.3.7 tell how radar uses radio waves and list ways it is useful to us. 3.3.8 compare and contrast how radio and television work.

GRADE LEVEL: Six

THEME: Interdependence

PRIMARY IDEA: 4.0 All living things are interdependent among themselves and with their environment.	
SECONDARY IDEAS	OBJECTIVES
4.1 Living things need energy from food to grow and to stay alive.	Given proper materials and directions, the student will: 4.1.1 explain the importance of photosynthesis. 4.1.2 compare the processes of photosynthesis and respiration. 4.1.3 identify sources of sugar, starch, fat, protein, minerals, and vitamins. 4.1.4 state the characteristics of proteins. 4.1.5 identify consumers and producers. 4.1.6 draw a food chain. 4.1.7 describe a food web. 4.1.8 identify a variety of feeding patterns in a food web. 4.1.9 explain the mass pyramid. 4.1.10 explain the energy pyramid. 4.1.11 identify changes that take place in an ecosystem. 4.1.12 define the concept of succession.

GRADE LEVEL: Six

THEME: Computers

PRIMARY IDEA: 5.0 Because of the increasingly widespread use of computers in our society, it is important to become aware of their function and application.	
SECONDARY IDEA	OBJECTIVES
5.1 A computer has four basic functions: input, process, memory, and output.	Given the proper materials and directions, the student will: 5.1.1 define the terms: computer, input, process, memory, and output. 5.1.2 label a diagram of a computer. 5.1.3 participate in developing a flow chart. 5.1.4 look at an example of a computer program in the computer BASIC language.

GRADE LEVEL: Six

THEME: Computers

PRIMARY IDEA: 5.0 Because of the increasingly widespread use of computers in our society, it is important to become aware of their function and application. .	
SECONDARY IDEA	OBJECTIVES
5.2 Earlier inventions led to the development of computers.	Given the proper materials and directions, the student will: 5.2.1 Sequence in ascending time order the names of a selected group of inventions that led to the development of the computer.

GRADE LEVEL: Six

THEME: Computers

PRIMARY IDEA: 5.0 Because of the increasingly widespread use of computers in our society, it is important to become aware of their function and application.	
SECONDARY IDEA	OBJECTIVES
5.3 Computers have a broad variety of applications but have inherent limitations.	Given the proper materials and directions, the student will: 5.3.1 state that the advantages of using a computer are speed, accuracy, memory, consistency, and repetition. 5.3.2 state that the limitations of using computers include: anxiety about their use, their need to be programmed accurately, their expense, their inability to make value judgements or provide answers to every question, and their inability to think. 5.3.3 list at least five computer uses and five computer-related careers.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE SIX

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
1.1	Vertebrates	9 days	J.P. Barufaldi, et al, <u>HEATH SCIENCE</u> , (Lexington, Massachusetts, D.C.Heath and Co., 1981) 1-29.	<u>Tree Hill Curriculum Guide</u> (Grade 6) <u>Films</u> Fish: A First Inquiry- 9 min. C. Amphibians: Frogs, Toads, and Salamanders- 11 min. C. What is a Reptile?- 18 min. C. Warm-blooded and Cold-blooded Animals - 13 min. C. Adaptations for Survival: Birds- 14 min. C. Mammals- 12 min. C.
1.2	Invertebrates	6 days	30-51	<u>Tree Hill Curriculum Guide</u> (Grade 6) <u>Films</u> Spiders- 11 min. C. Mollusks- Adaptive Radiation- 14 min. C. Life Story of the Sea Star- 11 min. C. Life Story of the Earthworm- 10 min. B&W Life in a Drop of Water (2nd Ed.)- 10 min. C.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE SIX

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
1.3	Plants	9 days	52-83	<u>Tree Hill Curriculum Guide (Grade 6)</u> <u>Films</u> Growth of Seeds- 14 min. B&W How Flowers Make Seeds- 11 min. C.
1.4	Life Cycle	7 days	84-111	<u>Tree Hill Curriculum Guide (Grade 6)</u> <u>Films</u> Insect Metamorphosis- 15 min. C. Animal Babies Grow Up- 11 min. C. Inheriting Your Physical Traits- 11 min. C. <u>Duval County Comprehensive Health Education Program (Grade 6 - Objectives 1.1.1, 1.1.2 and 1.1.3)</u>

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE SIX

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
2.1	Elements and Compounds	10 days	112-141	<u>What's Watt: Florida Energy Education Curriculum</u> (Tampa, Florida, Florida Electric Power Coordinating Group. 1980)* <u>Films</u> Explaining Matter: Atoms and Molecules- 13 min. C. Explaining Matter: Molecules in Motion- 11 min. B&W How Things Dissolve- 16 min. C. Wonder of Chemistry- 11 min. B&W
2.2	Electricity	10 days	142-171	<u>What's Watt: Florida Energy Education Curriculum</u>* <u>Films</u> Electricity All About Us (2nd Ed.)- 12 min. Studying Electricity- 16 min. C.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE SIX

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
2.3	Sources of Energy	8 days	172-201	<u>What's Watt: Florida Energy Education Curriculum*</u> <u>An Energy Learning Packet for Energy Conservation Awareness Elementary Guide</u> (Environmental Education Department, Duval County Schools) <u>Energy Conservation and Education in the Duval County School System Resource Guide for Teachers, Administrators, and Staff</u> <u>Tree Hill Curriculum Guide</u> (Grade 6) <u>Films</u> Energy...Ability to Do Work- 10½ min. C. Energy: Can't Do Without It- 14 min. C. Energy: The Problems and the Future- 23 min. C. Conservation of Mass: An Inquiry- 14 min. C.

*Call Science Office (390-2129) for guide

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE SIX

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
3.1	Properties of Light	9 days	202-233	<u>Films</u> Color and Light: An Introduction- 11 min. C. Studying the Behavior of Light- 16 min. C. How to Bend Light- 11 min. C. Learning About Light- 15 min. C.
3.2	Light and Vision	8 days	234-257	<u>Films</u> See Better: Healthy Eyes- 10 min. C.
3.3	Communication	7 days	258-289	<u>Duval County Computer Awareness Program</u> <u>Kits</u> Southern Bell Teletrainer* Southern Bell Business Trainer* <u>Films</u> The Computer- 11 min. C.

*Call in Sept. (350-2806) to schedule unit.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE SIX

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
4.1	Energy for Living Things	8 days	320-355	<u>An Energy Learning Packet for Energy Conservation Awareness Elementary Guide</u> <u>Tree Hill Curriculum Guide (Grade 6)</u> <u>Energy Conservation and Education in the Duval County School System Resource Guide for Teachers, Administrators, and Staff.</u> <u>Forest Ecology Resource Guide</u> <u>Films</u> Green Plants and Sunlight- 11 min. C. The Photosynthesis and Respiration Cycle- 13 min. C. Nature's Food Chain- 14 min. C. Animals and Their Food (2nd Ed.)- 10 min. C. African Animals: Hoof and Horn- 11 min. C. The Fresh Water Pond- 14 min. C. Life on a Dead Tree- 11 min. C.

KEY TO RECOMMENDED INSTRUCTIONAL MATERIALS

SCIENCE-GRADE SIX

Performance Objectives			Resources	
Number	Topic	Teaching Time	County Adopted Pages	Supplementary
5.0	Computers	3 days	273-275	Heath Science Newsletter, September 1982 Comic book available-free from Radio Shack, "The Computer Masters of Metropolis". Write: Radio Shack Educational Comic Book Program 1300 One Tandy Center Fort Worth, Texas 76102 Attached computer related activities.
GRAND	TOTAL TEACHING TIME - 18 Weeks 4 Days			

CORRELATION BETWEEN INSTRUCTIONAL MANAGEMENT SYSTEM (IMS) SKILLS

AND HEATH SCIENCE ACTIVITY SHEETS

GRADE SIX

IMS NO.	HEATH ACTIVITY SHEET/DUPLICATING MASTER PAGE NUMBER
	<u>COMMUNICATIONS</u>
6.V.1	4, 6, 10, 12, 18, 20, 26, 33, 40, 41, 45, 47, 53, 68, 75, 78, 81, 83
6.V.5	4, 10, 12, 18, 20, 26, 40, 41, 45, 47, 53, 68, 78, 83
6.C.1	1, 5, 6, 9, 14, 16, 17, 19, 25, 74
6.C.2	7, 13, 14, 20, 27, 28, 31, 33, 34, 35, 45, 48, 55, 56, 62, 69, 76, 83, 84
6.C.3	7
6.C.4	49
6.C.6	16, 29, 32, 52, 54, 57, 64
6.C.7	22, 38, 39, 43, 58, 63, 67, 82
6.C.8	7, 39, 42, 65, 66, 67, 82
6.C.9	1, 5, 9, 11, 14, 17, 19, 25, 50, 80
6.C.10	77
6.C.14	21, 70, 77
6.W.1	8, 15, 31, 36, 58, 74, 79
6.W.2	8, 74, 79
6.W.4	2, 5, 8, 15, 26, 31, 36, 58, 74, 79

CORRELATION BETWEEN INSTRUCTIONAL MANAGEMENT SYSTEM (IMS) SKILLS

AND HEATH SCIENCE ACTIVITY SHEETS

GRADE SIX (continued)

IMS NO.	HEATH ACTIVITY SHEET/DUPLICATING MASTER PAGE NUMBER
	<u>COMMUNICATIONS</u>
6.W.6	2, 5, 8, 15, 26, 31, 36, 58, 74, 79
6.W.8	2, 5, 8, 15, 26, 31, 36, 58, 74, 79
6.S.3	1, 5, 37, 38, 43, 58
6.S.4	11, 19, 23, 24, 25, 33, 39, 44, 46, 51, 59, 60, 67, 71, 72, 73, 78, 80